



San Diego
ASSOCIATION OF
GOVERNMENTS

Suite 800, First Interstate Plaza
401 B Street
San Diego, California 92101
(619)595-5300 Fax (619)595-5305

Dear San Diego County Resident:

Thank you for agreeing to take part in the 1995 Travel Behavior Survey. It is being conducted for SANDAG and Caltrans by NuStats International, a survey research firm. This important study, along with similar projects in other parts of California, will ultimately help save taxpayer money and improve our transportation system. By understanding how, why and where people make their daily trips, planners and public officials can make better use of increasingly scarce resources. Having current travel behavior information means we can develop strategies for managing and reducing congestion on our roads and highways.

Your participation is important toward meeting these goals. **All information collected is strictly confidential and will be used for research purposes only.** The trip information your household records in the enclosed diaries will be combined with data from all other participating area residents and visitors.

We very much appreciate your taking the time to help with this worthwhile project. If you have any questions or comments, please call the enclosed 800 number.

Sincerely,

MICHAEL B. BIXLER
Chairman, Board of Directors

Enclosure

Commonly Asked Questions About The 1995 Travel Behavior Survey

Q. Why is this survey being done?

A. Over the next 10 years more than \$10 billion in local, state and federal funds (your tax dollars) will be spent on transportation improvements in the San Diego region. This travel survey will help insure that this money is spent wisely and effectively. The survey will provide a data base from which computer models can be used to analyze future travel patterns and potential congestion areas. "What if" scenarios can be used to test proposed improvements to our roads and public transit services.

Q. How big is the survey?

A. Approximately 2,000 households, (a total of about 6,000 persons), will participate in this survey. In addition, separate surveys of visitors, of people entering and leaving the region, and of transit users will all be conducted by SANDAG and Caltrans this year. Data from those surveys will be combined with the travel survey results.

Q. How can information from 6,000 people describe the travel behavior of the whole region?

A. The science of statistics tells us that a sample of this size will accurately reflect the activities of everyone in the region, in much the same way that a sample of blood tells a doctor about all of a person's blood. This type of sampling has been used for decades to analyze people's television viewing habits. It also is the basis of the "long form" U.S. Census taken every 10 years.

Q. Is the information I provide kept confidential?

A. Absolutely. All individual information will be combined with all other survey responses. No individual person or household data will be used. In fact, once your information has been transferred to the main data base, all individual identification will be deleted.

(continued on other side)

- Q. Why does everyone in the household over age five need to keep a travel diary, even the kids?*
- A. Because the travel activities of everyone are important to understanding the overall travel patterns in our region. Kids generate many trips, sometimes with adults, sometimes not: to school, to a friend's house, to the mall, etc. (Kids under five are assumed to make no trips on their own.)*
- Q. Why is the survey being conducted by a firm in Texas?*
- A. It is far more efficient and cost effective for an experienced research firm to perform a survey of this magnitude than it is for SANDAG or Caltrans to do it themselves. There are only a handful firms in the entire country that have extensive experience with this type of study. NuStats is one of those firms, and was chosen by a multi-agency selection committee after a thorough review of all proposals.*
- Q. What will this survey cost?*
- A. About \$180,000. All of which comes from federal and state grants. The results of the survey will help guide the expenditure of more than \$10 billion over the next 10 years.*
- Q. How was I chosen?*
- A. By random selection from everyone in the San Diego region with a telephone. Random selection is the key to sampling. It does not favor any particular type of household or discriminate against any segment of the population.*

If you have any additional questions, please call the Travel Survey Hotline:

1-800-619-3601

Thank you again for your help with this important study.

TRAINING MATERIAL FOR 1995 VEHICLE OCCUPANCY AND CLASSIFICATION STUDY

The Vehicle Occupancy and Classification study is designed to monitor the number of people in passenger vehicles and to classify the types of vehicles travelling the freeways and local roads. This study provides information to help plan for the San Diego region's transportation needs.

This year we will be monitoring 103 sites (16 freeway sites and 87 local road sites). Counts will be made Monday through Friday starting at 6:30 a.m. and ending at 2:00 p.m.

In most cases two people will be working at each site. One will count the number of occupants in passenger vehicles, and the other will count the type (*classification*) of vehicle that goes by the count site. All counters will be trained to do both types of monitoring.

General Rules

1. Your safety is an important part of this study. Please consider your own safety when choosing the location to view the road. Select a site where you can see the direction of the traffic you are counting from a safe distance. Traffic safety vests and ID tags will be provided and must be worn at all times when at the site.
2. You are responsible for getting to your work assignment at the appointed time and location. Counts will begin at 6:30 a.m. and end at 2:00 p.m. You should arrive 15 minutes early to prepare so that the counts begin precisely at 6:30 a.m. During the preparation time, you must synchronize your watch with the other person before the count begins. You should allow plenty of time to get to the count location and find the best place to observe the vehicle traffic. If you have a completely clear view of the traffic lane that you are counting, you may count the occupants and classify the vehicles from your car for the duration of the day. Fifteen minutes will be needed after the final count which ends at 2:00 for checking data on the count sheet. Transportation to and from the survey site is your responsibility.
3. Due to the nature of the data collection system, you will be working without direct supervision. However, your supervisor will meet you several times each week to view the count location and answer questions you might have. At this time your supervisor will collect the completed count sheets from previous sites, so bring all work from previous days with you to each site.
4. If any of the following should occur, remember to immediately inform Sandra Nichols at 595-5344.
 - a. Illness - preventing you from working that day.
 - b. Missed counts, due to lateness or mix-up on location. (Lateness is defined as not being ready to count vehicles at the site at 6:30.)
 - c. Rain. (If it is drizzling, continue to count. If it is heavier rain, call me.)
 - d. Any other incidents which prevent you from working.

5. Counts will last 7½ hours (6:30 a.m. to 2:00 p.m.). You will be allowed two 15 minute breaks and one lunch break. The breaks will be staggered between the two workers assigned to a count site. While one person is on break, the other person will count **both** occupancy and classification of the vehicles passing the monitoring point at that time. The first break will be allowed only after 8:30 a.m. You must notify the other person you are going on a break, and you must give the other person your counterboard so the counts may continue while you are on break. You will be paid for 8 hours.

FIELD WORK

1. Materials for Each Counter
 - a. A reliable watch.
 - b. Two #2 pencils. Do not use anything but pencil.
 - c. Vehicle Occupancy Sheets or Vehicle Classification Sheets (depending upon your assignment).
 - d. Schedule for future site locations you will be counting.
 - e. Map of survey sites.
 - f. Clip board.
 - g. Counter board.
 - h. Definition of Terms and Classifications.
 - i. Traffic safety vest (must be worn at all times).
 - j. ID badge (must be worn at all times).

All of these materials, except the watch, will be provided by SANDAG. You may want to bring a beach chair to sit in. Counts may be made from your vehicle only if you have a completely clear and unobstructed view of all vehicles that travel by the count site.

2. Work Duties

All counters must know how to count vehicle occupants **AND** classify vehicles. The following explains what needs to be done when doing both the occupancy and classification monitoring.

Both tasks will use a counter board with nine buttons. Each button has a separate counter that adds one when the button is pressed. Labels will be placed above each counter to identify the item being counted. At the beginning of each day, all counters for all nine buttons must be reset to zero. Totals for all counter board buttons will be recorded at the end of each 15 minute segment. This total will be cumulative throughout the day, which means that you **DO NOT** reset the counter back to zero at the end of each time segment.

OCCUPANCY COUNTS

1-6 PASSENGER VEHICLES (BUTTONS: 1 2 3 4 5 6): Your role in the Vehicle Occupancy and Classification study is to count the number of occupants in passenger vehicles. After determining that the vehicle is a passenger vehicle, count the number of occupants (driver plus all passengers of any age). Push the button for the appropriate number on the counter board. Any passenger vehicle carrying 6 or more occupants will be counted as 6+.

You will count the occupancy for all vehicles **EXCEPT:** heavy duty trucks, buses, and motorcycles.

Passenger vehicles ARE DEFINED AS:

- cars
- vans that carry less than 12 people
- pickup trucks
- minivans
- full-size personal use pickup trucks
- taxis
- sport utility vehicles (Ford Explorer)
- company cars (SDG&E, PacBell, etc. on side of car)
- gardener trucks (lawn mower/ladder/etc. in back of truck bed with wood slats around truck bed)
- business cars and pickup trucks
- June's Attorney Service, etc.
- company car (SDG&E, PacBell, or other logo on side of car)
- government vehicles, such as city water utilities or state of CA vehicles
- police cars
- mail delivery jeeps
- limousines
- Cloud 9 Airport Shuttle (less than 12 passengers)
- Federal Express delivery van
- SDG&E, PacBell maintenance pickup truck
- cable company van
- police van
- ambulance van

Occupancy counts **WILL NOT** be made for:

- heavy duty trucks (see attached diagrams)
- motorcycles
- vans that carry 12 people or more
- buses (Greyhound, large tourist buses, transit buses, school buses, large airport buses)
- UPS trucks
- armored trucks

7 SCHOOL BUS (BUTTON 7): Count all school buses.

8 TRANSIT BUS/TOUR BUS (BUTTON 8):

transit buses (for example, San Diego Transit, County Transit, North
County Transit)
Greyhound and Goodall buses and other large tourist buses
sheriff buses

**9 SHUTTLE BUS WITH SEATING FOR 12 OR MORE PASSENGERS (BUTTON
9)**

airport buses
UCSD shuttle buses
rental car buses

Hand Tallying: When hand tallying, place one small tick mark in the appropriate box each time you see a pedestrian or a vehicle where you cannot count the number of occupants. At the end of each 15 minute time period, add the number of tick marks for that time period and write the total in the box. Circle the total number for each time period, even if the total is zero.

HT PED PEDESTRIANS (HAND TALLY) - only count those pedestrians walking in the direction you are counting. Include rollerbladers and skateboarders as pedestrians. When tallying the number of pedestrians for each 15 minute time period, only enter the number that passed by the count site during those 15 minutes. Do not record the cumulative counts. Enter zero if no pedestrians, rollerbladers or skateboarders passed by during a time period.

**HT
UNC UNABLE TO COUNT OCCUPANTS (HAND TALLY)** - When tallying the number of uncountable passenger vehicles, only enter the number that passed by the count site during those 15 minutes. Do not record the cumulative counts. Enter zero if no uncountable vehicles passed by during a time period.

Please record any unusual occurrence on the back of the count sheet. Unusual occurrences may be an accident on either side of the street, road construction, etc.

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CLASSIFICATION COUNTS

1 MOTORCYCLES (BUTTON 1): Count all motorcycles.

2-5 HEAVY DUTY TRUCKS INCLUDING RVs AND MOTORHOMES (BUTTONS 2 3 4 5): These trucks will be classified by the number of axles. Basically, count the set of wheels on one side of the truck. Please see the attached diagram. We will only count two, three, four, and five or more axles on a vehicle. If a heavy duty truck has five axles or more, please push the button for the 5+ category.

Examples: Large moving vans
RVs and motorhomes
grocery store trucks
UPS delivery truck (rectangular vehicle)
fire engine
paramedics truck
any vehicle that has a separate cab from the cargo bin

Note: A pickup truck hauling a two axle camper trailer is not considered a 4 axle vehicle.

6 TAXIS (BUTTON 6): Count all taxis. (Do not include airport shuttle vans.)

7 ALL OTHER BUSINESS PASSENGER CARS WITH LOGO ON DOOR (BUTTON 7) (Cars/sedans/minivans/sport utility vehicles): Do not include taxis because they will be counted on the other count sheet. Please include the following:

June's Attorney Service, etc.
company car (SDG&E, PacBell, or other logo on side of car)
government vehicles, such as city water utilities or state of CA vehicles
police cars
mail delivery jeeps
limousines
sport utility vehicles
minivans

8 BUSINESS LIGHT DUTY (Non-Car and Non-Heavy Duty): Pickup Trucks, Camper Shells, Large Vans, Shuttles seating less than 12 (BUTTON 8) These vehicles usually have a name on door.

pickup trucks w/logo on side

pickup trucks with no logo on side, but have metal racks in back of pickup bed

Cloud 9 Airport Shuttle (less than 12 passengers)

gardener trucks (lawn mower/ladder/etc. in back of truck bed with wood slats around truck bed)

UPS/Federal Express delivery van

SDG&E, PacBell maintenance pickup truck

cable company van

police van

ambulance van

9 NON-BUSINESS LIGHT DUTY (Non-Car and Non-Heavy Duty): Pickup Trucks, Camper Shells, Large Vans, Shuttles seating less than 12 without any commercial or business markings (BUTTON 9):

pickup trucks with no logo on the side

campers

large vans with no logo on the side

Hand Tallying: When hand tallying, place one small tick mark in the appropriate box each time you see a pedestrian or a vehicle where you cannot count the number of occupants. At the end of each 15 minute time period, add the number of tick marks for that time period and write the total in the box. Circle the total number for each time period, even if the total is zero.

HT BI BICYCLES (HAND TALLY) - only count those bicycles traveling in the direction you are counting. When tallying the number of bicycles for each 15 minute time period, only enter the number that passed by the count site during those 15 minutes. Do not record the cumulative counts. Enter zero if no bicycles pass by.

Please record any unusual occurrence on the back of the count sheet. Unusual occurrences may be an accident on either side of the street, road construction, etc.

Examples:

1. A red Camero with two occupants drives by. The OCCUPANCY COUNTER counts two passengers and presses button 2 once. The CLASSIFICATION COUNTER checks to see if it is a business passenger car. Since it is not, the CLASSIFICATION COUNTER ignores this vehicle.
2. One occupant in Vons semi-truck (4 axles) drives by. The OCCUPANCY COUNTER does not count it in any way because it does not fit into any of the categories that person is responsible for counting. Even though there is one occupant, the driver, this person will not count the driver as an occupant because we only count occupancy of passenger vehicles, not heavy duty trucks. The CLASSIFICATION COUNTER, on the other hand, counts the number of axles (4), then punches button 4 once. No other categories are applicable.
3. If a large airport shuttle bus which seats around 15, but only has two occupants drives by, the OCCUPANCY COUNTER would not count the occupants in this vehicle. But the OCCUPANCY COUNTER would press button 9 because the vehicle seats 12 or more passengers. The CLASSIFICATION COUNTER ignores this vehicle.
4. If two bicyclists ride by in the direction being counted, the OCCUPANCY COUNTER does not count them because they do not fit into any categories. The CLASSIFICATION COUNTER would hand tally these two riders by writing two tick marks to represent two bicyclists in the box during the time block being measured. At the end of the time period, count the number of tick marks in the box and circle the number in the space provided. Do not add these numbers from time block to time block. Just record the number that passed by for each time period.

SAN DIEGO

OCCUPANCY COUNT SHEET **Regional Vehicle Occupancy and Classification Study 1995**

LOCATION: _____ Date: _____ Day: MON TUES WED THUR FRI
 DIRECTION: _____ AGENCY: _____ Recorder's Name: _____
 LANES COUNTED: _____ ROADWAY CLASSIFICATION: _____ Weather Condition: clear overcast raining
 A.D.T. VOLUME (Actual or Estimate): _____ SITE NUMBER: _____ Visibility to See Occupants: good fair poor

TIME	OCCUPANCY Passenger Vehicles Include ALL Cars, Pickup Trucks, Campers, Vans (< 12 passengers), Taxis, Sport Utility Vehicles, Including Business Vehicles of These Types						BUSES			HAND TALLY	HAND TALLY
	Number of Occupants						School Bus	Transit Bus/ Tour Bus	Shuttle that Seats 12+ Passengers	No. of Pedestrians	Unable to Count Occupants in Passenger Vehicles
	1	2	3	4	5	6+					
6:30 - 6:45											
6:45 - 7:00											
7:00 - 7:15											
7:15 - 7:30											
7:30 - 7:45											
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1:30 - 1:45											
1:45 - 2:00											

PLACE COMMENTS ABOUT UNUSUAL CONDITIONS ON OTHER SIDE OF COUNT SHEET.

CLASSIFICATION COUNT SHEET

Regional Vehicle Occupancy and Classification Study 1995

LOCATION: _____ Date: _____ Day: MON TUES WED THUR FRI
 DIRECTION: _____ AGENCY: _____ Recorder's Name: _____
 # OF LANES COUNTED: _____ ROADWAY CLASSIFICATION: _____ Weather Condition: clear overcast raining
 A.D.T. VOLUME (Actual or Estimate): _____ SITE NUMBER: _____ Visibility to See Occupants: good fair poor

TIME	1	2				3	4	5	6	7	8	9	HAND TALLY
		HEAVY DUTY TRUCKS INCLUDING RVs/MOTORHOMES							BUSINESS PASSENGER CARS		LIGHT DUTY VEHICLES (Non-Car/Non-Heavy Duty): Pickup Trucks, Camper Shells, Large Vans, Shuttles that seat < 12 pass. Business Non-Business (Logo on Door) (No Logo)		
	Motorcycles	Number of Axles							Taxis	All Other Business Pass. Cars			No. of Bicycles
		2	3	4	5+								
6:30 - 6:45													
6:45 - 7:00													
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PLACE COMMENTS ABOUT UNUSUAL CONDITIONS ON OTHER SIDE OF COUNT SHEET.